

# SYSTEM AND METHOD FOR TESTING A QUALITY OF TELECOMMUNICATION DATA

## ABSTRACT OF THE DISCLOSURE

5   **[0044]** An invention is provided for testing a quality of communication data received from a SUT. The invention includes storing reference test data comprising a plurality of data segments, and receiving degraded test data also comprising a plurality of data segments, from the SUT. The data segments are located in the degraded test data, and data segments in the degraded test data are matched to related data segments in the reference test data. Further, the

10   data segments in the degraded test data are compared to corresponding data segments in the reference test data using a fixed point operation. In one aspect, the degraded test data can be normalized prior to locating the data segments, for example, utilizing a fixed point Fourier transform. Also, a receive filter can be applied to the normalized test data utilizing a fixed point operation. Further, a perceptual evaluation signal quality (PESQ) result can be generated

15   based on the comparison of the data segments in the degraded test data to corresponding data segments in the reference test data. The PESQ result optionally can be stored to a quality of service (QoS) data file.